

**IN THE UNITED STATES DISTRICT COURT FOR THE
SOUTHERN DISTRICT OF ILLINOIS**

**ADELAIDA ANDERSON and JEFF
ANDERSON,**

Plaintiffs,

v.

RAYMOND CORPORATION,

Defendant.

Case No. 19-CV-00800-SPM

MEMORANDUM AND ORDER

McGLYNN, District Judge:

INTRODUCTION

On July 29, 2017, Plaintiff Adelaida Anderson was operating a Raymond Model 425 Reach Forklift. During the course of operating the forklift she somehow found herself outside of the operator's compartment and not in control of the moving forklift which tragically trapped and severed her leg. A jury will be called upon to determine what happened, how it happened, and why it happened that Anderson was injured. Neither party claims there to be an eyewitness to help us understand this tragic and catastrophic event.

Both parties wish to present the opinions of engineers, accident reconstructionists, scientists, and physicians to reconstruct and explain the events of that day. The Andersons believe that it is Defendant Raymond Corporation's fault that this injury occurred and have presented witnesses that they believe are sufficiently qualified to explain to the jury how this accident happened and how

certain defects in the design of the Raymond model forklift led to her injury. Raymond advances their own phalanx of experts to explain to the jury why this incident occurred; and while tragic, opine that it was due to no fault on Raymond's part. A jury sitting in judgment of this dispute would be greatly benefited from the insights qualified experts could impart to them as they try to answer the questions posed to them.

As part of the Court's analysis, the Raymond's Operator's Manual was reviewed. The Manual for this forklift dedicates a section to safety. It gives instructions about how to use it safely and how to avoid serious injury. In multiple places in that Manual the operator is warned to stay inside the operator's compartment at all times while in use. However, it contains this very important caveat: "If your lift truck starts to tip . . . get off the truck immediately and move quickly away. If the truck tips over with you inside, you could be seriously injured or killed" (Doc. 112-6, p. 15). The Manual also covers stability issues. It cautions that lift truck can tip or overturn if "driving, braking or turning too fast." It can tip due to poor floor conditions" (*Id.*). It can tip due to "rapid changes in speed, turns or directions in travel" (*Id.*). Each warning regarding the risk of tipping shows an operator exiting the lift truck by stepping outside of the operator area in a direction away from the opposite end of the mast and forks (*Id.*).

The Raymond exerts a great deal of effort to explain the risk of harm to operators should they find themselves in an accident scenario where the forklift is about to run off a loading dock or similar raised area forks first. Alas, this is not an

accident scenario either party advances as a possible sequence of events leading to Anderson's injury.

Its only apparent relevance is to American National Standards Institute ("ANSI") standards that recommend against a locking or fixed door impeding the quick and unobstructed emergency exit by an operator from the forklift in a scenario where the forklift is about to go over or off a dock or elevated platform.

The Andersons advance as relevant to this accident, Clause 7.20.2 of ANSI B56.1-2012 which states: "Means shall be provided to disconnect the travel circuit automatically when the operator leaves the operating position." Also, ISO 3691-1:2011 standard indicates in clause 4.7.7.4 that, "Trucks with a side-facing seated or standing operator shall be so built that when travelling, the operator cannot unintentionally place his feet outside the confines of the truck; or, alternatively, the truck shall be equipped with a traction cut off (e.g. dead-man switch), enabled whenever an operator's foot is not in the safeguarded position." In addition, clause 4.2.2.4 states that, "Powered travel movement of the truck with a ride-on operator shall be possible only if the operator is in the normal operating position." These standards are pertinent to contemplate when examining Ms. Anderson's accident.

Before the Court are motions in limine filed by the parties seeking to bar the testimony of certain expert witnesses as their opinions and methodology do not meet the standards required in *Daubert v. Merrell Dow Pharm. Inc.*, 509 U. S. 579 (1993) and Federal Rule of Evidence 702. The Andersons also filed motions to secure pretrial

determinations that their tendered experts satisfy *Daubert* and Rule 702; a type of preclearance if you will.

This Order addresses the following motions filed by the Andersons: *Daubert* Motion regarding Meyer (Doc. 75), *Daubert* Motion regarding Kerrigan (Doc. 76), *Daubert* Motion regarding Jeka (Doc. 77), motion seeking to exclude expert testimony of Michael Rogers (Doc. 84), motion to exclude expert testimony of Kathleen Rodowicz (Doc. 85) and motion to exclude expert testimony of Robert Kerla (Doc. 86).

This Order addresses the following motions filed by Raymond: Motion to preclude testimony of John Meyer (Doc. 81), motion to preclude testimony of Jason Kerrigan (Doc. 82) and motion to preclude testimony of John Jeka (Doc. 83).

LEGAL STANDARD FOR THE ADMISSION OF EXPERT TESTIMONY

The admissibility of expert opinion evidence is governed by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). An excellent synthesis of the law that followed *Daubert* and animates Rule 702 appears in *Kirk v. Clark Equipment Company*, 991 F. 3d 865 (7th Cir. 2021). The *Kirk* Court started with the *Daubert* standard:

In *Daubert*, the Supreme Court explained that Rule 702 confides to the district court a gatekeeping responsibility to ensure that the proposed expert testimony “is not only relevant, but reliable.” In performing this role, the district court must engage in a three-step analysis, evaluating: “(1) the proffered expert’s qualifications; (2) the reliability of the expert’s methodology; and (3) the relevance of the expert’s testimony.”

Kirk, 991 F. 3d at 872 (citations omitted). The *Kirk* Court then expanded on the reliability of expert methodology:

When evaluating the reliability of expert testimony, the district court must make “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid.” A court may consider the following non-exhaustive list of factors:

(1) [W]hether the particular scientific theory “can be (and has been) tested”; (2) whether the theory “has been subjected to peer review and publication”; (3) the “known or potential rate of error”; (4) the “existence and maintenance of standards controlling the technique’s operation”; and (5) whether the technique has achieved “general acceptance” in the relevant scientific or expert community.

“No one factor is dispositive, however, and ‘the Supreme Court has repeatedly emphasized [that] the Rule 702 text is a flexible one.’” In addition, “the correct inquiry focuses not on ‘the ultimate correctness of the expert’s conclusions,’ but rather on ‘the soundness and care with which the expert arrived at her opinion.’”

A court’s determination that an expert possesses the requisite qualifications does not, without more, provide a sufficient basis for admissibility. We have underscored that “[e]ven [a] supremely qualified expert cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method.”

Id. at 873 (citations omitted).

The *Kirk* Court next stated:

“The purpose of *Daubert* . . . was to require courts to serve as gatekeepers so that unreliable expert testimony does not carry too much weight with the jury.” At the *Daubert* phase, then, “[t]he ultimate question is whether the expert’s approach is scientifically valid.” “The focus is on the expert’s methodology, not his ultimate conclusions.”

Id. at 877 (citations omitted). The *Kirk* Court said that a “key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested.” *Id.* at 877-78 (quoting *Daubert*, 509 U.S. at 593; citing *McCloud ex rel. Hall v. Goodyear Dunlop Tires N. Am., Ltd.*, 479 F. Supp. 2d 882, 892 (C.D. Ill. 2007) (“To meet the testing factor

required by *Daubert* an expert does not need to perform the best conceivable test. Instead, the question is whether valid scientific testing was performed.”).

ANALYSIS

The Court will address the objections to the Andersons’ proposed experts, then examine the objections to Raymond’s proposed experts.

I. John Meyer

The Court has reviewed the education, background, experience and training of John Meyer, PhD, and find him qualified to offer opinions relating to mechanical engineering, accident reconstruction, and failure analysis. He earned a PhD in Mechanical Engineering from Massachusetts Institute of Technology. He has taught engineering at the college level. He has many years of experience in accident reconstruction and failure analysis.

Much is made of the fact that this forklift was not equipped with a compartment door. Of great significance to the debate is applicable ANSI standards that recommend against making a locking and latching compartment door standard equipment on a stand-up lift truck. While the evidence shows that a compartment door can feasibly be designed for inclusion in this particular forklift, as a door is an available option, the applicable standards propounded by ANSI advise against it. The reason is that there should be no impediment to the operator being able to make a quick exit in an accident scenario.

John Meyer opines that the applicable ANSI is wrong and that the better reasoned engineering decision is to equip the forklift with a door. Raymond argues

that this opinion is simply not embraced by the engineering community and John Meyer's analysis and efforts in this case are not sufficiently exhaustive or thorough to green light a jury to consider rejecting the engineering consensus on this specific matter. Indeed, other courts have concluded that witnesses opining that a compartment door should be affixed to a standup, counterbalanced, lift truck lacked sufficient reliability and sufficient support by a scientific methodology to allow their presentment for a jury's consideration. *See, e.g., Lawrence v. Raymond Corp.*, 501 Fed. App'x 515, 518 (6th Cir. 2012) (affirming *Lawrence v. Raymond Corp.*, 2011 WL 3418324 (N.D. Ohio Aug. 4, 2011)); *Newell Rubbermaid, Inc. v. Raymond Corp.*, 2010 WL 2643417, at *6 (N.D. Ohio July 1, 2010), *aff'd* 676 F.3d 521, 528-29 (6th Cir. 2012); *Brown v. Raymond Corp.*, 318 F. Supp. 2d 591, 599 (W.D. Tenn. 2004), *aff'd* 432 F.3d 640, 646 (6th Cir. 2005) (citing *Dancy v. Hyster Company*, 127 F.3d 649 (8th Cir. 1997)); *Dhillon v. Crown Controls Corp.*, 269 F.3d 865, 869-70 (7th Cir. 2001).

This Court finds that John Meyer's opinion that Raymond was negligent or that its forklift is dangerously and defectively designed because it does not come standard with a compartment door, especially one that locks or latches, simply does not pass the *Daubert* test.

While the ANSI standard recommends against a locking or latching compartment door to protect against operator departure from the operating compartment, it is reasonable to inquire about the safeguards against serious injury in the event, as here, the operator departs from the operating compartment while the

vehicle is tipping or moving. It is this inquiry that exposes the true questions about the safety of the forklift in question.

It is in this realm of analysis that the Andersons' experts, including John Meyer, offer expert insights worthy of presentation to the jury for their consideration.

The Court has reviewed the 138-page report of John Meyer as well as the lengthy attachments (Doc. 75-3). The 57-page Attachment C is particularly compelling in documenting the scientific and engineering data he reviewed and claims to have replead upon in formulating his opinions (*Id.* at 151-207). The Court finds the opinions set out in that report are relevant to this case. Those opinions reflect his considered judgment after reviewing the pertinent scientific and engineering data.

Raymond claims that much of what John Meyer did was review the deposition testimony and opinions of others who have previously been barred by other courts from offering such opinions or whose opinions had been rejected by other juries. That assertion belies the substantially more exhaustive analysis engaged in by John Meyer as demonstrated in his report. It also ignores his review of OSHA records, lift truck accident reports, engineering standards, and other standup, counterbalanced lift trucks available on the market. Many of his opinions are based upon such other vehicles and how those vehicles, as designed and manufactured, adequately addressed the very safety deficiencies he opines that the Raymond model forklift is plagued by and relate to Anderson's injuries.

The Court has reviewed Judge Whittemore's January 28, 2021 Order in the case of *McHale, et al v. Crown Equipment Corp.*, 8:19-CV-00707 (U.S. Dist. Ct. Middle Fla., Tampa Div.). That case is similar in important respects to this case, and the admissibility of expert testimony of John Meyer, John Jeka, and Jason Kerrigan was the subject of that Order. Judge Whittemore found Meyer, Jeka, and Kerrigan possessed sufficient expertise to offer their opinions and that their methodology in reaching those opinions was sound. This Court finds Judge Whittemore's analysis of these witnesses, their opinions, and the application of *Daubert*, sound and persuasive.

II. Jason Kerrigan

The Court has reviewed the education, background, experience, and training of Dr. Jason Kerrigan, with respect to the fields of injury biomechanics, kinematics, and anthropomorphic test devices ("ATDs"). He holds a Ph.D. and M.E. in Mechanical and Aerospace Engineering and is an Associate Professor in the Department of Mechanical and Aerospace Engineering at the University of Virginia and the University's Center for Applied Biomechanics. The research conducted by the Center's members focuses on impact biomechanics for injury prevention. He regularly studies various motorized vehicles to determine safety optimization. Additionally, he is well versed in human body modeling and testing, specializing in active musculature and tensed response to impacts. As well, he has extensive experience determining injury countermeasures using human computational models and ATDs.

He has reviewed seven events like this one involving substantially similar, if not identical forklifts and injuries to the operator's left foot. While Kerrigan is not a

medical doctor, he is a professor at the University of Virginia School of Medicine in the Orthopedic Surgery department and has training and experience reviewing medical records to evaluate injuries (Doc. 76-7, pp. 1-3, 38). I find the witness qualified to render biomechanical engineering opinions regarding what caused Anderson's injuries, how the design of the forklift may have contributed to her injuries, and the use of data obtained from ATD devices.

Kerrigan analyzes the likely interactions Anderson would have with the forklift during the accident. Based on Anderson's testimony, he opines that the instability of the forklift caused her to move her left foot which led to her loss of balance and falling into the path of the moving forklift. This led to her left foot and leg being run over by the steered wheel of the forklift.

In addition to reviewing the testimony of Mrs. Anderson, he reviewed all the available witness statements and testimony about the accident (Doc. 76-7, pp. 4-6). Kerrigan reviewed Anderson's medical records to ascertain exactly how and where her foot was injured (*Id.* at 6-9). Kerrigan inspected the shoe Mrs. Anderson was wearing at the time she was injured (*Id.* at 9-11). He considered the design of the forklift and how, from a biomechanical point of view, she likely would have interacted with forklift – including how she would exit in an emergency (*Id.* at 10-16).

Based on his analysis, he identifies multiple safety precautions and designs which may have eliminated or reduced the likelihood of Anderson's injury. Kerrigan opines that Anderson's injuries would have been prevented if the forklift incorporated a door or other guard across the occupant entry doorway. To reach this position, in

addition to the steps previously outlined, Kerrigan utilizes his previous experience with numerous other forklift accident cases in which operators suffered left leg amputations, as well as previous inspections of an exemplar truck (Doc. 76-7, pp. 17-19). He applies his expertise in biomechanics and kinematics to evaluate the forklift design.

Additionally, he opines that a guard over the steered wheel would have reduced the likelihood that Mrs. Anderson would have been injured. He uses a diagram to show how a guard would have reduced the likelihood of injury (Doc. 76-7, pp. 19-20).

Similarly, Kerrigan opines that if the current joystick configuration was modified, or if a deadman pedal was placed under the left foot of the operator compartment, it would have reduced the likelihood that Anderson would have been injured. He also opines that the use of a backrest sensor would have encouraged the operator to remain in a stable operator position and would have reduced the likelihood of injury. Raymond's claim that Kerrigan's testimony is unreliable and unqualified is unfounded. Kerrigan is qualified to render his expert opinion on the biomechanical aspects of the interaction of Anderson with the forklift based on his credentials and methodologies. Kerrigan's biomechanical analysis is reliable and is based on witness' statements, forklift design, testimony, and medical records. (Doc. 76-7, pp. 4-9).

III. John Jeka

The Court has reviewed the education, background, and training of John Jeka PhD and find him qualified to offer testimony on matters regarding human balance.

Dr. Jeka received a PhD in Neuroscience from Florida Atlantic University, an MA in psychology from Tufts University, and is a professor and Chair of the Department of Kinesiology and Applied Physiology in the Department of Health Services at the University of Delaware. In addition to teaching at the University of Delaware, Dr. Jeka directs the Control of Balance and Locomotion Laboratory at the University which focuses on understanding the neural and biomechanical basis of human upright balance. Dr. Jeka has authored or co-authored a number of academic articles discussing balance as well as having served as the Executive Editor of the Journal of Motor Behavior.

The Andersons tender the opinions of John Jeka, PhD., a renowned expert in his own field. His area of expertise is the study of human balance, what we reflexively do to maintain our balance when instability is induced, and what causes humans to lose their balance. The Andersons' theory of the accident is that something caused instability in Anderson's stance while operating this forklift. John Jeka, PhD. will offer opinions about what movements Anderson would have made instinctively in reaction to the sudden instability she was experiencing, one of which was widening her gait. In widening her gate, she may have moved her foot outside the forklift platform.

Raymond offers many criticisms of Jeka's opinions that the jury may find interesting, maybe compelling. However, Jeka's training and experience are sufficient to allow him past the *Daubert* gate to the witness stand. His opinions are

not the “unscientific speculation of a genuine scientist.” See *Rosen v. Ciba-Geigy Corp.* 78 F.3d 316, 318 (7th Cir. 1996). His methodology is scientifically sound.

IV. Michael W. Rogers

This court has considered the background, qualifications, and methodology of Michael W. Rogers, P.E. to determine whether he should be allowed to provide expert testimony on behalf of Raymond.

Michael W. Rogers, P.E. has a bachelor’s degree in mechanical engineering from Iowa State University and a master’s degree in mechanical engineering from the University of Illinois at Chicago. He is a Licensed Professional Engineer in four states, including Illinois. He is licensed to operate different types of forklifts, including the one involved in the accident. Additionally, Rogers has a background in forklift design safety standards, as he is a member of the ANSI B56.1 safety committee. Currently, he works as a Principal Engineer in Fusion Engineering’s mechanical engineering group. His areas of expertise include design analysis, machine design, lift truck analysis, and material handling equipment analysis, and accident reconstruction. He has consulted in vehicular component testing, machine design, and accident reconstruction for a number of vehicles, including forklifts.

Rogers offers several opinions regarding the accident and the design of the lift truck involved in the accident. He believes that the forklift was not unreasonably unsafe, did not possess any defects, was designed to be fit for its ordinary use, and complied with all industry regulations, and did not malfunction over the course of the accident. He contends that this model can be used in situations where a tipover event

is possible and that exiting the lift is the safest action to take when such an event occurs, not staying inside the operator area.

Furthermore, Rogers asserts that an open-back model forklift is the safest model and adding a rear operator guard would make the lift more unsafe. He states that there should be no circumstance where a lift operator's limb would be forced out of the machine due to a lack of balance, as long as the operator is acting according to their training. There is no evidence that greater safety warnings nor any alternative design would have prevented Anderson's injury. Moreover, a dual deadman pedal and more aggressive stopping mechanisms would not have prevented the injuries and present other hazards. Ultimately, Rogers believes that Anderson, by failing to follow her training, lift manuals, and industry standards, is responsible for her injury; there is nothing unsafe or defective about Raymond's forklift model.

Rogers has considerable credentials and experience in the field of mechanical engineering; he has the expertise to offer credible opinions regarding the design of the forklift in question here as well as its basic mechanics. Thus, he is qualified to offer an opinion regarding various forklift designs, their safety features, and their risks. Rogers is also qualified to offer testimony on the ANSI B56.1 safety standards. Though he does not have complete knowledge of how certain standards were reached, his status as a member of the committee illustrates his working knowledge of the history and progression of such safety standards. *Daubert* does not require an expert to have an exhaustive understanding of the methodology of how such standards were determined.

However, his credentials render him to be unqualified to offer several opinions that are unrelated to the mechanics of the forklift itself. First, Rogers does not have the expertise necessary to make judgments regarding Anderson's actions. He does not have the qualifications to credibly judge what a reasonable operator of a forklift would voluntarily or involuntarily do; he is not an expert in kinesiology or biomechanics. Second, Rogers is not qualified to provide testimony about the forces that caused Anderson to move, as he is not an expert in human balance. Therefore, he is prevented from offering opinions about the forces causing Anderson to exit the forklift as well as Anderson's decision to exit the forklift.

This court has determined that Rogers is qualified to present his opinions about the mechanics and features of the forklift in question, forklift safety standards, and the likelihood of a forklift accident, but is not qualified to testify about the various factors that may have caused Anderson to exit the forklift and her ability to voluntarily do so.

In order for the testimony to be accepted, the expert must engage in reliable scientific methodology to reach their conclusions. Mr. Rogers has performed several field tests over his career to analyze the safety of various forklift designs. Recently, he conducted several off-dock tests using ATDs to make conclusions about the safety of rear doors on forklifts. The use of ATDs to conduct vehicle accident studies is well-documented as a reliable methodology within the scientific community, given the implausibility of using human subjects to conduct such testing. Requiring experts to

conduct accident field tests to have reliable opinions is an impractically high bar to clear.

Rogers analyzed forklift accidents that did occur and conducted the most ethically plausible method of simulating forklift accidents by using ATDs. Though the field tests are imperfect, ATDs are the most reliable substitute for humans.

Finally, Rogers was personally involved in surveys that determined the frequency of accidents based on the type of forklift involved. He surveyed numerous companies in the greater Chicago area regarding forklift-related accidents. The survey was identical for each incident, and only accidents with first-hand confirmation were analyzed. Though the conclusions that Rogers reached can be subject to scrutiny during cross-examination, his qualifications and methodology undertaken in analyzing lift truck design and safety render his testimony admissible.

Rogers's opinions regarding the design and safety of the particular type of forklift are clearly relevant to this case. His analysis of the prototype as well as forklift safety features and standards will assist the jury in determining whether Raymond's product is unreasonably unsafe in some manner. Further, his use of statistics and survey data regarding forklift accidents will provide the jury with important context for the accident in question.

V. Robert Kerla

The Andersons seek to exclude the expert testimony of Robert Kerla (Doc. 86). The Court's scheduling order required Raymond to disclose all experts by February 1, 2021 (Doc. 49). Because Kerla was not disclosed as an expert witness by Raymond

in a timely manner, he will not be permitted to testify as an expert witness at trial pursuant to Federal Rule of Evidence 702. However, because Kerila works as an engineer at Raymond and has personal knowledge related to the design issues in this case he will be permitted to testify as to factual matters within his personal knowledge pursuant to Federal Rule of Evidence 602.

Additionally, to the extent any of Kerila's testimony is deemed an opinion, his personal knowledge of the design of the forklift at issue qualifies him to give opinion testimony as a lay witness pursuant to Federal Rule of Evidence 701. Rule 701 provides: "If a witness is not testifying as an expert, testimony in the form of opinion is limited to one that is: (a) rationally based on the witness's perception; (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702." Kerila's personal knowledge of the design of the forklift qualifies him to offer opinion testimony that is "rationally based on his perception" and "helpful to clearly understanding [his] testimony or to determining a fact in issue." *Id.* However, Kerila's opinion testimony will not be allowed to be "based on scientific or technical knowledge that is within the scope of Rule 702." *Id.*

VI. Kathleen Rodowicz

This Court has reviewed the education, background, and training of Dr. Kathleen Rodowicz and find her qualified to offer opinions in relation to biomechanical engineering including on matters involving balance, accident reconstruction and analysis, and risk of injury during off deck events involving

forklifts. The Andersons do not challenge Dr. Rodowicz's expertise but rather challenge the relevancy of her conclusions and her methodology in coming to her conclusions in regard to the nature of the accident, her opinion on the effectiveness of a door to prevent the injury, and the risk of serious injuries if a person stays inside a forklift during an off-dock event.

Dr. Rodowicz's report provided nine primary conclusions that speak to three major subjects. First, that Anderson's accident could not have occurred as described and that therefore she must have voluntarily placed her foot outside of the forklift prior to the accident. Second, that there is no data to support the conclusion that Dr. Kerrigan's safety designs would have prevented Anderson's accident. Third, that if an operator stays in the forklift during an off-dock event, the risk of serious injury is high.

The Andersons have two objections about Dr. Rodowicz's conclusions regarding the accident. First, they object to Dr. Rodowicz testifying about the forces and movements that are present when the model forklift is in operation. As part of Dr. Rodowicz's investigation she went to the accident site and utilized an exemplar model, along with Rogers, to take physical measurements of the model as well as utilizing Vicon Blue Trident IMU's to measure the accelerations of both the forklift and the operator during normal operation within the warehouse, including a similar path Anderson took prior to the accident. Dr. Rodowicz's methodology in coming to this conclusion is based on sound scientific standards. The Andersons disagree with

Dr. Rodowicz's conclusion. However, she is qualified to render her opinion on the matter.

Second, the Andersons object to Dr. Rodowicz's conclusion that Anderson voluntarily left the compartment. As part of Dr. Rodowicz's investigation she went to the accident site and utilized an exemplar model in addition to a surrogate of similar height and weight to Anderson. Dr. Rodowicz had the surrogate stand in a five point of contact position within the forklift and then try and place her left foot in front of the guide wheel in a manner consistent with Dr. Kerrigan's injury position. Dr. Rodowicz also had the surrogate widen her stance by placing her left foot outside of the truck to simulate her widening her base in response to a postural disturbance. Dr. Rodowicz also took calculations of the forces applied during operation of an exemplar model by using Vicon Blue Trident IMU's. In Dr. Rodowicz's deposition testimony, she makes no claims as to why Anderson may have placed her foot outside of the operator area. Dr. Rodowicz came to her conclusion using an acceptable scientific method, and while the Andersons may disagree with Dr. Rodowicz's conclusions, she is qualified to render her opinion on the matter.

The Andersons also object to Dr. Rodowicz's opinions that an operator compartment safety guard door on the model forklift will make the forklift less safe. Reviewing Dr. Rodowicz's report she made two comments regarding a door. First, countering Dr. Kerrigan's assertion that a door would have prevented Anderson's injury: "there are no data to indicate that the presence of a rear door would prevent an operator from voluntarily placing a lower extremity outside of the running lines of

a lift truck” (Doc. 85-2, p. 21). Dr. Rodowicz’s second comment about a door was describing the nature of the off-dock event that was being tested by ATDs “where the operator is forced to remain inside the occupant compartment of the lift truck due to the presence of a rear door” (Doc. 85-2, p. 22). Dr. Rodowicz does not appear to make any express claims that a rear door on the model forklift would make it inherently less safe, but rather in the context of when an operator is forced to stay inside the forklift during an off-dock event. Her testing and methodology are scientifically sound, so Dr. Rodowicz is qualified to express that conclusion.

The Andersons additionally object to Dr. Rodowicz’s opinion that if a person remains in a forklift during an off-dock event they are likely to experience significant injuries. This conclusion by Dr. Rodowicz is drawn from various tests done over the years utilizing ATDs in which they are placed within the operator area of a forklift and dropped off a dock in several ways. From those tests, data is collected on forces applied and likely impact areas and is used to create an understanding of injuries that may occur and their severity. The Andersons contend that since ATDs do not act as humans would in an accident, any data collected from ATD testing is not reliable. While it is accepted that ATDs do not act as humans would in an accident, their use is widely accepted in the scientific community as it would be inappropriate to subject humans to the risk of serious injury in testing off-dock accidents with actual human occupants and numerous peer reviewed studies have validated the ability of ATDs to assess injury potential. Therefore, Dr. Rodowicz’s methodology, including relying on ATD testing, is based on sound scientific standards.

As to relevancy, the Court finds that Dr. Rodowicz's opinions are relevant to this case. Her testimony and opinions relate to the incident at issue and go to Raymond's defense to the elements that must be proven at trial.

CONCLUSION

The Court **GRANTS** in part and **DENIES** in part the Andersons' Motion to exclude expert testimony of Michael Rogers (Doc. 84). The Court **DENIES** the Andersons' Motion to exclude expert testimony of Kathleen Rodowicz (Doc. 85). The Court **GRANTS** in part and **DENIES** in part the Andersons' Motion to exclude opinion testimony of Robert Kerla (Doc. 86).

The Court **GRANTS** in part and **DENIES** in part Raymond's Motion to preclude testimony of John Meyer (Doc. 81). The court **DENIES** Raymond's Motions to preclude testimony of Jason Kerrigan (Doc. 82) and John Jeka (Doc. 83).

The Andersons' Motions regarding their own experts' opinions (Docs. 75, 76, and 77) are **DENIED** as **MOOT**.

IT IS SO ORDERED.

DATED: July 27, 2021

s/ Stephen P. McGlynn
STEPHEN P. McGLYNN
U.S. District Judge